

Percent Identity

Divergence

	1	2	
1		66.1	1
2	45.3		2
	1	2	

SEQ 43 and Figure 25 Briles
SEQ 24 SP100D1

10

20

CCAAGGCTATTAGGTGACACT
CCAAGGCA GCCACTTCTTCTA

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

30

40

1 ATAGAA TACTCA AGCTATCC
1 ATATGGCA A - - AGACAGAAAC

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

50

60

1 ATCAAAGCTTA TCGCTTGTCAAA
9 ATAGGAAAGGCTGCTAAACAAA

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

70

80

1 TAAATC - ACAAAATATGTAGAT
9 GCGTCCGATGGAATATA TAGAA

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

90

100

10 CAAATCTCTGTGTTAAGCACAGT
9 AAAAGGAGAGGAGATTC A

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

110

120

100 AAAACATCTCTA - ATTACCTT
9 ACTAGGATAGAGAA AACAATA

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

130

140

119 CCAAATATGTCGCTTGAATT
119 CCAAATATGTCGCTTGAATT

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

150

160

139 GATAGCTTGAACCTTGTTC A
139 ATAAAGGAGCCGCAATTAA

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

170

180

159 GTGA - - - TGCCTTAATGTGAA
159 AAGGAAGTATTTGCGTGAAAT

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

190

200

76 T T C G T T T T A G T T T T T C C A G T SEQ 43 and Figure 25 Briles
79 T A A A G T T T T A G A A G A G A A G SEQ 24 SP100D1

210

220

96 T T A T G C A G T T A T T T T C T A T C SEQ 43 and Figure 25 Briles
99 T C G A A A G A T G A G T T G C C G T C SEQ 24 SP100D1

230

240

16 G A C G A A T A G C T G A A G A G G A A SEQ 43 and Figure 25 Briles
19 A G - A A A T A A A A C C A A A C T T A SEQ 24 SP100D1

250

260

36 A A G C T A T T A C A T C A A G T T A T SEQ 43 and Figure 25 Briles
38 G A C G C A G C T T T T G A G A - - - - SEQ 24 SP100D1

270

280

56 A A T C C C A A A A G G A A G C T T A A SEQ 43 and Figure 25 Briles
54 A G T T T A A A A A A G A T A C A T T G SEQ 24 SP100D1

290

300

76 A A G A T A A A A A A A A A T T A SEQ 43 and Figure 25 Briles
74 A A A C C A G G A G A A - A A A G G T A G SEQ 24 SP100D1

310

320

96 A T T A A A A T A C A A T T C A T A T T SEQ 43 and Figure 25 Briles
93 C A G A A G C C A A A G A A G A A G G T T SEQ 24 SP100D1

330

340

116 G A A G A A A T A T A A A A G G T T A SEQ 43 and Figure 25 Briles
113 G A A G A A G C T A A G A A A A A A G C SEQ 24 SP100D1

350

360

136 A A G A A A A A A A A A A A A A A A SEQ 43 and Figure 25 Briles
133 C G A G G A T C A A A A A A A A A A A G SEQ 24 SP100D1

370

380

56 A T A A A C A T G T T T G C - - A T C A SEQ 43 and Figure 25 Briles
53 A T C G T C G T A A C T A C C C A A C C SEQ 24 SP100D1

390

400

174 A A A A G C G A A A G A A A A G T A C A SEQ 43 and Figure 25 Briles
173 A A T A C T T A C A A A A C G C T T G A SEQ 24 SP100D1

410

420

194 T T A T T C A A T T C G T A A A T T T A SEQ 43 and Figure 25 Briles
193 A C T T G A A A T T G C T G A G T T C G SEQ 24 SP100D1

430

440

114 G A T T G G A G T A C C A G T G T A G SEQ 43 and Figure 25 Briles
113 A T G T G A A A C T - - T A A A G A A G SEQ 24 SP100D1

450

460

134 C G T T C C C A G T T T C T A A G SEQ 43 and Figure 25 Briles
131 C G G A G C T T C A A C T A G T A A A A SEQ 24 SP100D1

470

480

154 G G A A G G C C C T C C T G G A C C SEQ 43 and Figure 25 Briles
151 G A G G A - - - A G C T A A A G A A A C SEQ 24 SP100D1

490

500

174 A G A C C A C - - - G A A G C A C C A SEQ 43 and Figure 25 Briles
168 T C G A A A C G A G C C C A C A A T T A SEQ 24 SP100D1

510

520

194 A C C G C C C T C T C T C T A A T A SEQ 43 and Figure 25 Briles
188 A G C A A G C A A A A G A G A A A G T SEQ 24 SP100D1

530

540

114 C C C A A A C A C A G A A A A T A C C A SEQ 43 and Figure 25 Briles
108 G A G A G T A A A A A A G C T G A G G C SEQ 24 SP100D1

550

560

34 A A - G C G C T A A A C A G T C G T C G SEQ 43 and Figure 25 Briles
28 T A C A A C C C T T A G A A A A C A T C A SEQ 24 SP100D1

570

580

53 A T G A A T A T A T A G A A A A A A T G SEQ 43 and Figure 25 Briles
48 A - - G A C A G A T C G T A A A A A A G SEQ 24 SP100D1

590

600

73 T T G A C C C A G A T T C A A C T A G A SEQ 43 and Figure 25 Briles
66 C A G A A G A A G A A G C T A A A C C A SEQ 24 SP100D1

610

620

93 T A G A A G A A A A C A T A C C C A A A SEQ 43 and Figure 25 Briles
86 A A A G C A G A T G C T A A G T T G A A SEQ 24 SP100D1

630

640

113 A T G T C C C C T T A A A C A T A A A G SEQ 43 and Figure 25 Briles
106 G G A A C C T A A T G T A G C G A C T T SEQ 24 SP100D1

650

660

133 T T G A G C C C A A T T A A C A A A SEQ 43 and Figure 25 Briles
126 C A C A T C A A G G T A A A C C A A A G SEQ 24 SP100D1

670

680

153 T A T C T C C C A A T T A A T C T SEQ 43 and Figure 25 Briles
146 G G G C G G G C A A A A C G A G G A G T SEQ 24 SP100D1

690

700

173 T A G A A G A A A A T T C C A A A T A SEQ 43 and Figure 25 Briles
166 T C C T G G A G A G C T A G C A A C A C SEQ 24 SP100D1

710

720

193 G C C C C C C C A A A T A A A A - SEQ 43 and Figure 25 Briles
186 C T G A T A A A A A A G A A A A T C A T SEQ 24 SP100D1

730 740
 '12 GCGAAGTTAGACGC CGCTTT SEQ 43 and Figure 25 Briles
 '06 GCGAAGCTCTTCAGATTTCTAG SEQ 24 SP100D1

750 760
 '32 TGAATACTTAA AAA - - - - - SEQ 43 and Figure 25 Briles
 '26 CGTAGGTGAGAGAAACTCTTC SEQ 24 SP100D1

770 780
 '46 - AGATACAT - - - TGAAA CCA SEQ 43 and Figure 25 Briles
 '46 CAAGCTCACCCTCCCAATCA SEQ 24 SP100D1

790 800
 '62 GAGAGAAAGGTAGC - GAAGC SEQ 43 and Figure 25 Briles
 '66 GGA AAAAAAGGTAGCCACAGCC SEQ 24 SP100D1

810 820
 '81 TAAGTAAAG - TGAAGTAA SEQ 43 and Figure 25 Briles
 '86 TGAGAGGAAAGCTTCAAGAAC SEQ 24 SP100D1

830 840
 '00 GTATTAAGTAC - - AGGCT SEQ 43 and Figure 25 Briles
 '06 CCGAGGAAAAAAGCCCAAGGAT SEQ 24 SP100D1

850 860
 '18 CAAATTAAGGAGTCTC - - - SEQ 43 and Figure 25 Briles
 '26 CAAATTAAGGAGTCTC - - - SEQ 24 SP100D1

870 880
 '37 TAATTAAGGAGTCTC - - - SEQ 43 and Figure 25 Briles
 '46 TAATTAAGGAGTCTC - - - SEQ 24 SP100D1

890 900
 '57 - CAAATTAAGGAGTCTC - - - SEQ 43 and Figure 25 Briles
 '66 CAAATTAAGGAGTCTC - - - SEQ 24 SP100D1

920

76 A T T C C T G A G T C - G A T G T C A A SEQ 43 and Figure 25 Briles
86 A T T C C T G A G T C C G A T G T C A A SEQ 24 SP100D1

940

05 A C T T A A A C A A C C G G A G C T T G SEQ 43 and Figure 25 Briles
06 A C T T A A A G A A C C G G A G C T T G SEQ 24 SP100D1

960

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15  A A C T A G T A A A - G A G G A A G C C T SEQ 43 and Figure 25 Briles
26  A A C T A G T A A A A G A G G A A G C C T SEQ 24 SP100D1

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980

34 G A A - - - - C T C G A G A C C A G G A SEQ 43 and Figure 25 Briles
46 A A G C A A C C T T G A G A C C A G G A SEQ 24 SP100D1

1000

50 [REDACTED] SEQ 43 and Figure 25 Briles
66 [REDACTED] SEQ 24 SP100D1

1020

70 C C A A A G T T G A G A G T A A A A A A SEQ 43 and Figure 25 Briles
86 C C A A A G T T G A G A G T A A A A A A SEQ 24 SP100D1

1040

90 G T T G A T T A T G A T T T T T A SEQ 43 and Figure 25 Briles
006 C C T G A C G C T A C A A G G T T A G A SEQ 24 SP100D1

060

010 A A A C A T C A A G A A - G T A SEQ 43 and Figure 25 Briles
026 A A A C A T C A A G A A A G A T C G T A SEQ 24 SP100D1

080

029 A A A A A G C A A A G A A G A A G - T SEQ 43 and Figure 25 Briles
046 A A A A A G C A A A G A A G A A G C T SEQ 24 SP100D1

1090

1100

.048 A A A C G G A A A G C C G C A A A A C A SEQ 43 and Figure 25 Briles
.066 A A A C G G A A A A C C A C C A C A A A A SEQ 24 SP100D1

1110

1120

.068 A G A T A A A A G T T A A A G A A A A A C SEQ 43 and Figure 25 Briles
.086 A G A T A A A A G T T A A A G A A A A A C SEQ 24 SP100D1

1130

1140

.088 C A G C T G A A C A A C C A C A A C C A SEQ 43 and Figure 25 Briles
.106 C A G C T G A A C A A C C A C A A C C A SEQ 24 SP100D1

1150

1160

.108 C C C C C C C C T A C T C A A C C A C A A SEQ 43 and Figure 25 Briles
.126 G C G C C C C C T A C T C A A C C A C A A SEQ 24 SP100D1

1170

1180

.127 A SEQ 43 and Figure 25 Briles
.146 A SEQ 24 SP100D1

1190

1200

.147 A SEQ 43 and Figure 25 Briles
.166 A SEQ 24 SP100D1

1210

1220

.167 A SEQ 43 and Figure 25 Briles
.186 A SEQ 24 SP100D1

1230

1240

.187 T T A SEQ 43 and Figure 25 Briles
.206 T T A SEQ 24 SP100D1

1250

1260

.207 A T T A SEQ 43 and Figure 25 Briles
.226 A T T A SEQ 24 SP100D1

1270

1280

.227 G A A T A T A A A C G C T T G A - T C A SEQ 43 and Figure 25 Briles
.246 G A A T A T A A A C G C T T G A C T C A SEQ 24 SP100D1

1290

1300

.246 A C A G G A A C C G C C A A A A A C T G SEQ 43 and Figure 25 Briles
.266 A C A G G A A C C G C C A A A A A C T G SEQ 24 SP100D1

1310

1320

.266 A A A A A C C A A C A C A A C C A T - T SEQ 43 and Figure 25 Briles
.286 A A A A A C C A A C A C A A C C A T C T SEQ 24 SP100D1

1330

1340

.285 A C T C C A A A A A C A SEQ 43 and Figure 25 Briles
.306 A C T C C A A A A A C A G G C T G G A A SEQ 24 SP100D1

1350

1360

.296 SEQ 43 and Figure 25 Briles
.326 A C A A G A A A A C G G T A T G T G G T SEQ 24 SP100D1

1370

1380

.296 SEQ 43 and Figure 25 Briles
.346 A C T T C T A C A A T A C T G A T G G T SEQ 24 SP100D1

1390

1400

.296 SEQ 43 and Figure 25 Briles
.366 T C A A T G G C A A C A G G A T G G C T SEQ 24 SP100D1

1410

1420

.296 SEQ 43 and Figure 25 Briles
.386 C C A A A A C A A C G G T T C A T G G T SEQ 24 SP100D1

1430

1440

.296 SEQ 43 and Figure 25 Briles
.406 A C T A T C T A A A C G C T A A T G G T SEQ 24 SP100D1

1450

1460

.296 SEQ 43 and Figure 25 Briles
.426 G C T A T G G C G A C A G G A T G G C T SEQ 24 SP100D1

1470

1480

.296 SEQ 43 and Figure 25 Briles
.446 C C A A A A C A A T G G T T C A T G G T SEQ 24 SP100D1

1490

1500

.296 SEQ 43 and Figure 25 Briles
.466 A C T A T C T A A A C G C T A A T G G T SEQ 24 SP100D1

1510

1520

.296 SEQ 43 and Figure 25 Briles
.486 T C A A T G G C A A C A G G A T G G C T SEQ 24 SP100D1

1530

1540

.296 SEQ 43 and Figure 25 Briles
.506 C C A A A A C A A T G G T T C A T G G T SEQ 24 SP100D1

1550

1560

.296 SEQ 43 and Figure 25 Briles
.526 A C T A C C T A A A C G C T A A T G G T SEQ 24 SP100D1

1570

1580

.296 SEQ 43 and Figure 25 Briles
.546 G C T A T G G C G A C A G G A T G G C T SEQ 24 SP100D1

1590

1600

.296 SEQ 43 and Figure 25 Briles
.566 C C A A T A C A A T G G T T C A T G G T SEQ 24 SP100D1

1610

1620

.296 SEQ 43 and Figure 25 Briles
.586 A C T A C C T A A A C A G C A A T G G C SEQ 24 SP100D1

1630

1640

296 SEQ 43 and Figure 25 Briles
606 G C T A T G G C G A C A G G A T G G C T SEQ 24 SP100D1

1650

1660

296 SEQ 43 and Figure 25 Briles
626 C C A A T A C A A T G G C T C A T G G T SEQ 24 SP100D1

1670

1680

296 SEQ 43 and Figure 25 Briles
646 A C T A C C T C A A C G C T A A T G G T SEQ 24 SP100D1

1690

1700

296 SEQ 43 and Figure 25 Briles
666 G A T A T G G C G A C A G G A T G G C T SEQ 24 SP100D1

1710

1720

296 SEQ 43 and Figure 25 Briles
686 C C A A A A C A A C G G T T C A T G G T SEQ 24 SP100D1

1730

1740

296 SEQ 43 and Figure 25 Briles
706 A C T A C C T C A A C G C T A A T G G T SEQ 24 SP100D1

1750

1760

296 SEQ 43 and Figure 25 Briles
726 G A T A T G G C G A C A G G A T G G C T SEQ 24 SP100D1

1770

1780

296 SEQ 43 and Figure 25 Briles
746 C C A A T A C A A C G G T T C A T G G T SEQ 24 SP100D1

1790

1800

296 SEQ 43 and Figure 25 Briles
766 A T T A C C T C A A C G C T A A T G G T SEQ 24 SP100D1

1810

1820

.296 SEQ 43 and Figure 25 Briles
.786 G A T A T G G C G A C A G G T T G G G T SEQ 24 SP100D1

1830

1840

.296 SEQ 43 and Figure 25 Briles
.806 G A A A G A T G G A G A T A C C T G G T SEQ 24 SP100D1

1850

1860

.296 SEQ 43 and Figure 25 Briles
.826 A C T A T C T T G A A G C A T C A G G T SEQ 24 SP100D1

1870

1880

.296 SEQ 43 and Figure 25 Briles
.846 G C T A T G A A A G C A A G C C A A T G SEQ 24 SP100D1

1890

1900

.296 SEQ 43 and Figure 25 Briles
.866 G T T C A A A G T A T C A G A T A A A T SEQ 24 SP100D1

1910

1920

.296 SEQ 43 and Figure 25 Briles
.886 G G T A C T A T G T C A A T G G C T C A SEQ 24 SP100D1

1930

1940

.296 SEQ 43 and Figure 25 Briles
.906 G G T G C C C T T G C A G T C A A C A C SEQ 24 SP100D1

1950

1960

.296 SEQ 43 and Figure 25 Briles
.926 A A C T G T A G A T G G C T A T G G A G SEQ 24 SP100D1

1970

1980

.296 SEQ 43 and Figure 25 Briles
.946 T C A A T G C C A A T G G T G A A T G G SEQ 24 SP100D1

1990

2000

.296 SEQ 43 and Figure 25 Briles
.966 G T A A A C T A A A C C T A A T A T A A SEQ 24 SP100D1

2010

2020

.296 SEQ 43 and Figure 25 Briles
.986 C T A G T T A A T A C T G A C T T C C T SEQ 24 SP100D1

2030

2040

.296 SEQ 43 and Figure 25 Briles
:006 G T A A G A A C T T T T T A A A G T A T SEQ 24 SP100D1

2050

2060

.296 SEQ 43 and Figure 25 Briles
:026 T C C C T A C A A A T A C C A T A T C C SEQ 24 SP100D1

2070

2080

.296 SEQ 43 and Figure 25 Briles
:046 T T T C A G T A G A T A A T A T A C C C SEQ 24 SP100D1

2090

2100

.296 SEQ 43 and Figure 25 Briles
:066 T T G T A G G A A G T T T A G A T T A A SEQ 24 SP100D1

2110

2120

.296 SEQ 43 and Figure 25 Briles
:086 A A A A T A A C T C T G T A A T C T C T SEQ 24 SP100D1

2130

2140

.296 SEQ 43 and Figure 25 Briles
:106 A G C C G G A T T T A T A G C G C T A G SEQ 24 SP100D1

2150

2160

.296 SEQ 43 and Figure 25 Briles
:126 A G A C T A C G G A G T T T T T T T G A SEQ 24 SP100D1

	2170	2180	
296			SEQ 43 and Figure 25 Briles
146	T G A G G A A A G A A T G G C G G C A T		SEQ 24 SP100D1
	2190	2200	
296			SEQ 43 and Figure 25 Briles
166	T C A A G A G A C T C T T T A A G A G A		SEQ 24 SP100D1
	2210	2220	
296			SEQ 43 and Figure 25 Briles
186	G T T A C G G G T T T T A A A C T A T T		SEQ 24 SP100D1
	2230	2240	
296			SEQ 43 and Figure 25 Briles
206	A A G C C T T C T C C A A T T G C A A G		SEQ 24 SP100D1
	2250	2260	
296			SEQ 43 and Figure 25 Briles
226	A G G C T T C A A T C T C T G C T A G G		SEQ 24 SP100D1
	2270	2280	
296			SEQ 43 and Figure 25 Briles
246	G T G C T A G C T T G C G A A A T G G C		SEQ 24 SP100D1
	2290	2300	
296			SEQ 43 and Figure 25 Briles
266	T C C A C G G A G T T T G G C A G C G C		SEQ 24 SP100D1
	2310	2320	
296			SEQ 43 and Figure 25 Briles
286	C A G A T G T T C C A C G G A G A T A G		SEQ 24 SP100D1
	2330	2340	
296			SEQ 43 and Figure 25 Briles
306	T G A G G A G C G A G G C C G C G G A A		SEQ 24 SP100D1

	2350	2360	
296			SEQ 43 and Figure 25 Briles
326	T T C A C G A A C T G C G A C G T T T T		SEQ 24 SP100D1
<hr/>			
	2370	2380	
296			SEQ 43 and Figure 25 Briles
346	C T C C T T T G A G G T T A A T C A A T		SEQ 24 SP100D1
<hr/>			
	2390	2400	
296			SEQ 43 and Figure 25 Briles
366	C G T T T C A A G T G T T C G T A G G C		SEQ 24 SP100D1
<hr/>			
	2410	2420	
296			SEQ 43 and Figure 25 Briles
386	G A T C T T C A T C T T G T C T T C A A		SEQ 24 SP100D1
<hr/>			
	2430	2440	
296			SEQ 43 and Figure 25 Briles
406	A G G T C A A A T C A G G T A G G A T T		SEQ 24 SP100D1
<hr/>			
	2450	2460	
296			SEQ 43 and Figure 25 Briles
426	T C T C C T G T T T C A A A G T T T A T		SEQ 24 SP100D1
<hr/>			
	2470		
296			SEQ 43 and Figure 25 Briles
446	G G T G G C C C T G G T T G A A G		SEQ 24 SP100D1

Decoration 'Decoration #1': Shade (with solid black) residues that match the Consensus exactly.